

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

SECRET

25X1

COUNTRY East Germany/USSR

REPORT

SUBJECT Soviet Echograph and Depth Finder
Produced at Funkwerk Koepenick

DATE DISTR.

29 JUL 1957

NO. PAGES

1

REQUIREMENT
NO.

RD

DATE OF
INFO.
PLACE &
DATE ACQ.

REFERENCES

25X1

SOURCE EVALUATIONS ARE DEFINITIVE APPRAISAL OF CONTENT IS TENTATIVE

25X1

report with diagrams
concerning the Soviet echograph and depth finder produced at
Funkwerk Koepenick.

25X1

ENCLOSURE ATTACHED
PLEASE ROUTE

SECRET

STATE	X	ARMY	#X	NAVY	#X	AIR	#X	FBI		AEC									
-------	---	------	----	------	----	-----	----	-----	--	-----	--	--	--	--	--	--	--	--	--

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT INFORMATION REPORT

SECRET

25X1

1. The depth finder produced at Koeppenick radio engineering plant and designated H3-5P consists of six separate units,¹ namely the depth finder proper, the echograph (recorder), amplifier, impulsing circuits, regulating resistance and filter. Auxiliary units are one transformer and two oscillators. The outer measurements of the casings are as follows:

echograph	300 x 470 x 270 mm
depth finder	350 x 240 x 190 mm
amplifier	290 x 250 x 170 mm
impulsing circuit	300 x 280 x 200 mm

2. The instrument is capable of the following ranges:

echograph

Tumbler switch position	Rptary switch position	Ranges
0...100	I	0...60 m
"	II	40...100 m
"	III	90...150 m
"	IV	140...200 m
"	V	180...240 m
0...500	I	0...300 m
"	II	40...340 m
"	III	90...390 m
"	IV	140...440 m
"	V	180...480 m

Depth finder

2 ranges I	0 through 100 m
II	0 through 500 m

3. The chassis are suspended in casings provided with rubber buffers. The spring suspension is rather hard. The resistances have quite unusual values, such as 9.5 K-Ohm, 83 K-Ohm etc. Some of the resistances are designated in colored code, others are enlettered in clear. The specifications and measurements of the condensers and resistances agree with those generally found in the GDR. Larger condensers are designed as electrolytes, smaller ones are designed as MP-type or paper condensers; the latter condensers are mainly used as coupled-condensers

SECRET

25X1

SECRET

25X1

- 2 -

(Koppelkondensatoren). The condensers are enlettered B 3 P. The inner cabling of the set is made of "marine inner cabling" (MIL). All individual parts are designed corrosion-proof, or they are nickle-coated or treated by an elcol process.

4. The amplifier incorporates a tuned input circuit, a resonant amplifier stage, a resistance amplifier stage, a thyatron-final stage for the red light indicator device, and a pentode final stage for the echograph recorder. The amplifier is alternately used for the echograph or for the depth finder proper and is equipped with the following tubes:

2 x 6 J K 8
 1 x T 1 - 0,1/1,3 (Thyatron)
 1 x 6 P 3 (final tube)
 1 x 5 U 4 C (two-way rectifier)

5. The echograph incorporates the recording device.² A rotating arm performs the recording operation. The feed of paper is vertical. The side wall of the casing of the echograph carries the tumbler switch for the course recording from 0 through 100 m and 0 through 500 m; and the front plate has a rotary switch that is used as a stage switch.

6. The set-up and operating procedure of the impulsing circuit is the same as with all equipment produced at the Koepenick radio engineering plant. It is equipped with the following tubes: 3x 5 U 4 C
 condensor (Stosskondensator) : 1.5 μ F / 1.500 V
 Voltage : 1.000 V
 resonance frequency : 22 KHz

7. For the red light indicating device, 0 through 100 and 0 through 500 m ranges can be selected by means of a tumbler switch.

1. Comment. For switching diagram and factory plate of the H 3 - 5 P set see Annex 1.

25X1

2. Comment. For sketch of the recording device of the echograph see Annex 2.

25X1

SECRET

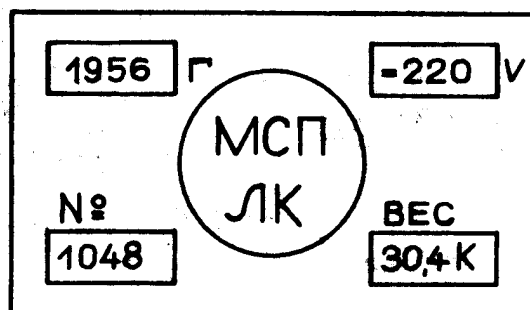
25X1

SECRET

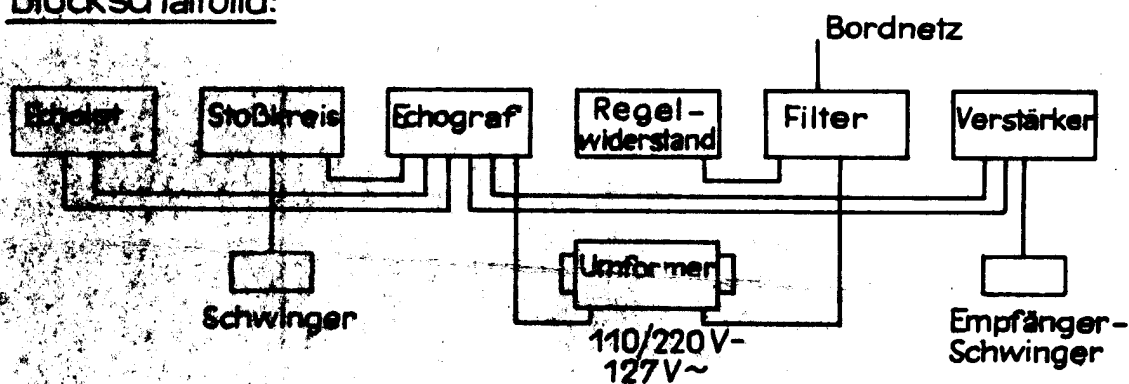
25X1

Annex

25X1

Fabrikschild:

ohne Maßstab

Blockschaltbild:Sowjetische Echograf- und Echolotanlage Typ H3Л-5P

SECRET

25X1

SECRET

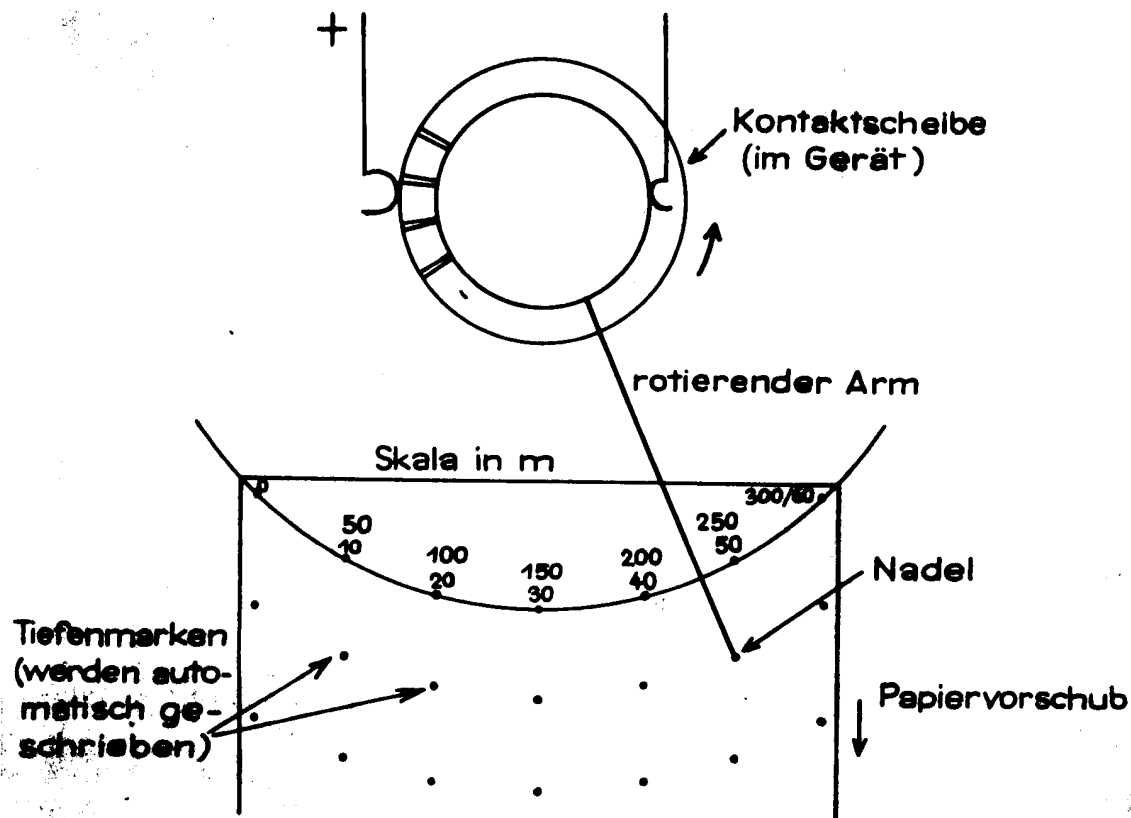
25X1

SECRET

25X1

Annex 2

25X1

Sowjetische Echograf-und Echolotanlage Typ H3Л-5P

Skizze des Schreibgerätes.

SECRET

25X1